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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,633	02/13/2004	Geoffrey Alan Scarsbrook	248810US2CONT	5368
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			MONDT, JOHANNES P	
ALEXANDRIA, VA 22314		• •	ART UNIT	PAPER NUMBER
			3663	
			NOTIFICATION DATE	DELIVERY MODE
			01/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	Applicant(s)		
10/777,633	SCARSBROOK ET AL.	SCARSBROOK ET AL.		
Examiner	Art Unit			
Johannes P. Mondt	3663			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 26 December 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires <u>3</u> months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). **NOTICE OF APPEAL** 2. The Notice of Appeal was filed on . A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). <u>AMENDMENTS</u> 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: _____. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 💢 5. Applicant's reply has overcome the following rejection(s): _____ 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. Tor purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: i.' , Claim(s) rejected: Claim(s) withdrawn from consideration: _____. AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. 🖂 The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 13. Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because: The request for Reconsideration is not persuasive for the following reasons:

(1) On 35 USC 103(a) rejections: Counter to applicant's allegation (page 3 of Remarks) that the cited portion in Kitabatake et al discloses a diamond with nitrogen because CVD was used to produce the diamond in the first place while Kitabatake et al disclose only "a post synthesis", said post synthesis is clearly disclosed not to include any nitrogen in at least some embodiments (see cited portion, col. 1, l. 43-53) and also clearly states that "the defects in the diamond crystal can be annihilated efficiently". That, as applicant proceeds, there must be a carbon source, is evident. However, why Kitabatake et al would have to conform to applicant's preference as to embodiment applicant does not explain.

On applicant's arguments about his interpretation of the use of the term "defects", and the accompanying allegation that Kitabatake et al "focuses" in his patent "only on non-diamond carbon" (see Remarks, page 4), see, e.g., title, and abstract, to attest the focus on diamond rather than non-diamond, while, for what Kitabatake et al mean by "defects", see "Background of the Invention", col. 1, I. 23-40, for evidence that Kitabatake et al actually focus on the kind of defects introduced by the addition of foreign atoms (through implantation), from which it is clear that annihilation of "the defects" reasonably means no nitrogen-induced defects in the crystal lattice. That, with reference to applicant's argument on page 4, first paragraph, a graphite peak still appears in the Raman spectrum does not refute at all the absence of nitrogen. Therefore, said arguments are not persuasive.

Applicant's argument (page 4, final paragraph, that Kitabatake et al "is not a synthesis method" is not persuasive: only the end result

Applicant's argument traversing combinability of Collins and Kitabatake et al is not persuasive because both Kitabatake et al and Collins are drawn to CVD diamond on account of which they are analogous art. As mentioned in the Office Action, Collins serves to show the selection of poly-crystal and single-crystal materials both are available to one of ordinary skill in the art, while the advantages on mobility removal of grain boundary effects are well known in the area of semiconductor diamond. Applicant's allegation that even when combined the "result would not be the presently-claimed invention" apparently refers to the arguments on page 3 and 4, which have already been discussed overhead, because no new arguments are presented (page 5, lines 1-2).

Applicant's additional comments (page 5) on examiner "erroneous findings", in particular that removal of grain boundaries removes impediments to mobility and lifetime is logically deficient, because that competing crystal defects also have a large impact on the characteristics of the material does not at all detract from the positive effects of removal of grain boundaries on mobility and lifetime. Applicant's traverse of the conclusion of the "present invention is not a "mere selection of known materials generally" as such material was not previously known" hinges on whether "such" material would have been obvious. Finally, applicant's argument in traverse of Sussmann et al is not responsive to the reasons for relying on Sussmann et al and hence is discarded. The rejections under 35 USC 103(a) are therefore maintained.

(2) On Double Patenting Rejections: applicant's argument is based on an additional limitation on thickness in the patent claims not found in the instant application. However, the obviousness rejection is an anticipation-type obviousness rejection: the claim in the patent can be, and is, narrower than claim 1; however said patent claim still anticipates the claim in the application. Therefore, the double patenting rejection also stands...

Primary Examiner:

rimary Examiner: (1/7/2008)